FORD MOTOR COMPANY

EXECUTIVE ORDER A-010-1564 New Diesel or Incomplete Medium-Duty Vehicles Using Certified Engines

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-02-003:

IT IS ORDERED AND RESOLVED: The following diesel or incomplete medium-duty vehicles (MDV) with a manufacturer's GVWR from 8501 to 14000 pounds are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

					NGINE DESC	RIPTION				
ENGINE FAMILY AFMXE06.8AWH		Υ	ENGINE	EMISSION	FUEL TYPE 1		STANDARDS	ENGINE	ECS & SPECIĄL	OBD
		H MAN	UFACTURE	1 0.0			& TEST PROCEDURE	SIZES (L)	FEATURES 3	OBD(F)
EXECUT	IVE ORD	ER FORD MO	OTOR COMP		I Gasoline			6.8	TWC, SFI, 2HO2S	
A-0	0-1563						Otto			
Gasoline, LPG or Alcohol Vehicles Only VEHICLE DESCRIPTION										
EVAPORATIVE FAMILY UL (K)		FUEL TANK CAPACITY (gallons)	VEHICLE MODEL YEAR	VEHICLE MAKE & MODELS	ENGINE (L)		ENGINE MODELS / CODES (rated power, in hp)			COMPLIANCE
20GAS	150	19	2009	F-350 Chassis Cab	6.8	F-3	OBD(F)			
60GAS	150	40	2009 F-350 Chassis Cab			F-3	OBD(F)			
	AFMXE EXECUT A-0° LPG or PORATIV LY 20GAS	AFMXE05.8AW EXECUTIVE ORD A-010-1563 LPG or Alcohol v PORATIVE LY UL (K) 20GAS 150	AFMXE06.8AWH EXECUTIVE ORDER A-010-1563 LPG or Alcohol Vehicles Only PORATIVE LY UL (K) 20GAS 150 19	AFMXE05.8AWH EXECUTIVE ORDER A-010-1563 LPG or Alcohol Vehicles Only PORATIVE LY UL (K) 20GAS 150 MANUFACTURE FORD MOTOR COMF CAPACITY (gallons) MANUFACTURE FORD MOTOR COMF (APACITY (gallons) YEAR 2009	ENGINE FAMILY AFMXE05.8AWH EXECUTIVE ORDER A-010-1563 LPG or Alcohoi Vehicles Only PORATIVE LY UL (K) 20GAS 150 EMISSION STD CATEGORY ULEV VEHICLE MAKE & MODEL YEAR WODELS VEHICLE MAKE & MODELS MODELS F-350 Chassis Cab	ENGINE FAMILY AFMXE05.8AWH EXECUTIVE ORDER A-010-1563 LPG or Alcohoi Vehicles Only PORATIVE LY UL (K) UL (K) 20GAS 150 EMISSION STD CATEGORY ULEV Gaso VEHICLE MODEL YEAR VEHICLE MAKE & ENGINE (L) YEAR FORD MOTOR COMPANY VEHICLE MAKE & ENGINE (L) YEAR FORD MOTOR COMPANY ULEV CAPACITY (gallons) FORD MOTOR COMPANY FORD MOTOR COMPANY VEHICLE MAKE & ENGINE (L) FORD MOTOR COMPANY FUEL T	AFMXE06.8AWH MANUFACTURER EXECUTIVE ORDER A-010-1563 LPG or Alcohol Vehicles Only PORATIVE LY UL (K) Qallons) 19 2009 F-350 Chassis Cab 6.8 F-38 FMANUFACTURER CATEGORY Gasoline ULEV VEHICLE MAKE & ENGINE (L)	ENGINE FAMILY AFMXE06.8AWH EXECUTIVE ORDER A-010-1563 ENG MOTOR COMPANY A-010-1563 LPG or Alcohoi Vehicles Only PORATIVE LY UL(K) Gasoline FUEL TYPE Gasoline Gasoline Otto VEHICLE DESCRIP VEHICLE MAKE & ENGINE (IL) Gasoline FUEL TYPE STANDARDS A TEST PROCEDURE VEHICLE DESCRIP VEHICLE MAKE & ENGINE (IL) (IL) CAPACITY (gallons) 19 2009 F-350 Chassis Cab 6.8 F-350: 9F718T0510	ENGINE FAMILY AFMXE05.8AWH EXECUTIVE ORDER A-010-1563 FORD MOTOR COMPANY LPG or Alcohol Vehicles Only PORATIVE LY UL (K) UL (K) Gasoline FUEL TYPE FUEL TYPE Gasoline FUEL TYPE FUEL TYPE Gasoline FUEL TYPE Gasoline FUEL TYPE FUEL TYPE Gasoline FUEL TYPE FUEL TYPE Gasoline FUEL TYPE FUEL TYPE FUEL TYPE FUEL TYPE GASOLINE SIZES (L) FUEL TYPE FUEL T	ENGINE FAMILY AFMXE05.8AWH EXECUTIVE ORDER A-010-1563 EXECUTIVE ORDER A-010-1563 ENGINE FORD MOTOR COMPANY ULEV ULEV ULEV ULEV ULEV STANDARDS & TEST PROCEDURE 6.8 TWC, SFI, 2HO2S TWC, SFI, 2HO2S VEHICLE DESCRIPTION PORATIVE LY UL (K) (gallons) UL (VEHICLE MAKE & MODELS (L) (rated power, in hp) 2009 F-350 Chassis Cab 6.8 F-350: 9F718T0510, 9F728M0510 (362 for all codes)

*=not applicable; GVWR=gross vehicle weight rating; 13 CCR xyz=Title 13, Celifornia Code of Regulations, Section xyz; 40 CFR 86.abc=Title 40, Code of Federal Regulations, L=liter, hp=hcrsepower, kw=kilowatt; (2004may26)

CNG/LNG=compressed/iquefied natural gas; LPG=liquefied petroleum gas; E85=85% ethanol fuel; MF=multi fuel a.k.a BF=bi fuel; DF=dual fuel; FF=flexible fuel;

SULEV / ULEV / EV=super ultra / ultra / low emission vehicle;

SULEV / ULEV / LEV=super ultra / ultra / low emission vehicle;

ECS=emission control system; TWC/OC=three-way/oxidizing catalyst; WU (prefix) =warm-up catalyst; DPF=diesel particulate filter; HC2S/O2S=heated/oxygen sensor; HAFS/AFS=heated/air-fuel-ratio sensor (a.k.a., universal or linear oxygen sensor); TBl=throttle body fuel injection; SFIMFl=sequential/multi port fuel injection; DGG=direct gasoline injection; GCARB=gaseous carburator; IDM/DI=indirect/direct diesel injection; TC/SC=turbo/super charge; CAC=charge air cooler; EGR=exhaust gas recirculation; PAR/AIR=pulsed/secondary air injection; SFIMFl=sequence recirculation; PAR/AIR=pulsed/secondary air injection; SFIMFl=sequence recirculation; PAR/AIR=pulsed/secondary air injection; SFIMFl=sequence modification; PAR/AIR=pulsed/sec

Following are: 1) the FTP exhaust emission standards or family emission limit(s) as applicable under 13 CCR 1956.8; the EŪRO and NTE limits under the applicable California exhaust emission standards and test procedures for heavyduty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, in g/bhp-hr, for this engine family. "Diesel" CO, EURO and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test. Procedures in lieu of testing. (For dual- and flexible-fuel, the CERT values in brackets [] are those when tested on conventional test fuel.)

	NM	· NMHC		NOx		NMHC+NOx		co		PM		нсно	
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	
STD	0.14	*	0.20	*	*	*	14.4	•	0.01	*	0.01	*	
FEL	*	*	*	*	*	*	•	•	*	*	*	*	
CERT	0.06	*	0.07	•	*	·	6.2	*	*	*	0.000	*	
NTE		*		•		*		*		*		, *	

⁴ g/bhp-hr=grams per brake horsepower-hour, FTP=Federal Test Procedure; EURO=Euro III European Steady-State Cycle; NTE=Not-to-Exceed emission limit; STD=standard or emission test cap; FEL=family emission limit; CERT=certification level; NMHC/HC=non-methane/hydrocarbon; NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter; HCHO=formaldehyde;

BE IT FURTHER RESOLVED: Certification to the FEL(s) listed above, as applicable, is subject to the following terms. limitations and conditions. The FEL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

BE IT FURTHER RESOLVED: The listed engine models have been certified to the optional emission standards and test procedures in 13 CCR 1956.8 applicable to diesel or incomplete MDV with a 8501-14000 pound GVWR and shall be subject to 13 CCR 2139(c) (in-use testing of engines certified for use in diesel or incomplete MDV with a 8501-14000 pound GVWR).

BE IT FURTHER RESOLVED: For the listed vehicle models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1968.2 (on-board diagnostic, full or partial compliance), 13 CCR 1976(b)(1)(F) (evaporative emission standards), 13 CCR 2035 et Seq. (emission control warranty), and 13 CCR 2235 [fill pipes and openings of motor vehicle fuel tanks]. (The braces {} are for gasoline, LPG or alcohol fueled vehicles only. The brackets [] are for gasoline or alcohol fueled vehicles only.)

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

day of June 2009. Executed at El Monte, California on this

Annette Hebert, Chief Mobile Source Operations Division